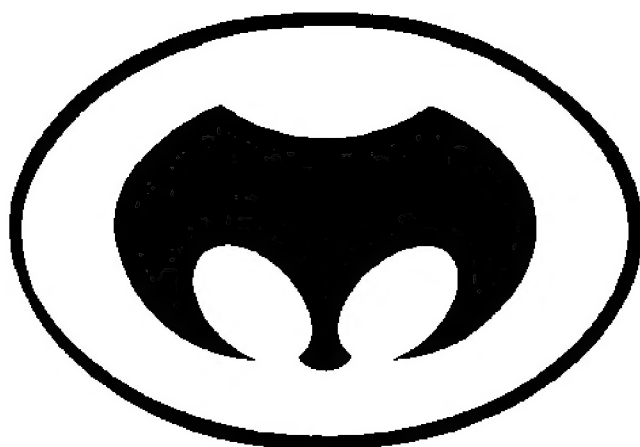




DVK-001 KEYBOARD

USERS MANUAL



**SECURITY** *with* **VISION**



# CONTENTS

<b>1. FEATURES.....</b>	<b>3</b>
<b>2. KEY GUIDE .....</b>	<b>4</b>
<b>3. LOGGING ON AND OFF.....</b>	<b>4</b>
<b>4. BASIC OPERATION.....</b>	<b>5</b>
4.1 PRIORITY CONTROL.....	5
4.2 JOYSTICK CONTROL .....	6
4.3 PRESET CONTROL.....	7
4.4 TOUR CONTROL .....	7
4.5 SEQUENCE.....	7
4.6 AUXILIARY COMMANDS .....	8
4.7 SPECIAL FUNCTIONS .....	8
4.8 GLOBAL COMMANDS .....	8
4.9 SITE CONTROL .....	8
<b>5. OPERATIONAL CONFIGURATION .....</b>	<b>9</b>
5.1 STORING A PRESET .....	9
5.2 STORING A TOUR .....	9
<b>6. SYSTEM CONFIGURATION.....</b>	<b>10</b>
6.1 SETUP KEYBOARD.....	10
6.2 CONFIGURE MATRIX .....	15
6.3 CONFIGURE RECEIVER .....	15
6.4 ENTERING TEXT .....	16
6.5 SET-UP CAMERA.....	16
6.6 SET-UP DIALUP .....	17
<b>7. TROUBLE SHOOTING GUIDE.....</b>	<b>18</b>
<b>8. DECLARATION OF CONFORMITY .....</b>	<b>19</b>
<b>9. PRODUCT WARRANTY .....</b>	<b>20</b>
<b>10. DOCUMENT HISTORY .....</b>	<b>21</b>

## 1. FEATURES

- Camera selection 0 - 256
- Monitor selection 1 - 256
- Preset selection 0 - 999
- Preset tour 1 - 4
- Address setting 1 - 32
- Alarms supported via matrix
- Matrix or standalone mode
- 3 levels of user access
- Self diagnostics
- Lock camera to monitor
- Full camera control functions
- Receiver and matrix setup with optional qwerty keyboard

Whilst every effort has been made to confirm the information in this document is correct, **MEYERTECH LIMITED** cannot accept any liability for any errors, omissions and or incorrect information contained within this document.

No part of this document may be reproduced or distributed in any form or by any means without prior written consent from **MEYERTECH LIMITED**.

**MEYERTECH LIMITED** are committed to continuous product development and therefore reserve the right to change specifications without notice.

©2004 ALL RIGHTS RESERVED.

## 2. KEY GUIDE

- 0 - 9 numeric keypad
- PRESET used for recalling and storing presets in range 9 - 999
- Tour used for recalling and storing tours
- F1 sends next command to all cameras and used to enter configuration mode
- F2 decodes next key press of P1 - P8 as a special function
- ESC interrupts current function and removes control from current camera
- ALARM used to accept and cancel alarms
- SEQ used to select a sequence pattern
- MON used to select a monitor
- ENTER used to complete current entry
- AL\_INHIB or AL\_PI used to inhibit alarm functionality
- FLIP, turns camera through 180 degrees.
- AUX, auxiliary latched camera control function
- WIPE, wipe camera control function
- A-FOCUS, toggle auto / manual focus camera control
- HOME, used to recall camera to it's last position prior to a preset call
- FC-ZM, used to select between focus and zoom operation of joystick

## 3. LOGGING ON AND OFF

The keyboard supports 3 levels of user access:

- Operator
- Manager
- Executive

To log on to the keyboard the user must enter a 4 digit pin number.

Note: the pin number is obscured as it is typed in.

*See section 6.1.6 for information on pin numbers*

To log off the keyboard depress the ESC key for 1 -2 seconds until the keyboard beeps. It is also possible to log off by switching the keyboard off.

The user is allowed different functionality depending on the access level used to log on.

### Operator

- Basic camera controls

**Manager**

- All operator functions
- Operational configuration
- System configuration

**Executive**

- All operator functions
- All manager functions
- Camera lock

## 4. BASIC OPERATION

The keyboard operates on the monitor and camera that are shown on the display. These are referred to as the **current monitor** and **current camera**.

To change the camera selected on the **current monitor** type the camera number followed by ENTER. The numeric keys pressed are displayed and when the ENTER key is pressed the display is updated with the **current monitor** and new **current camera**.

<number> ENTER

**Note :** Selecting a camera doesn't prevent another keyboard from selecting a different camera to the same monitor. If that happens this change will not be reflected on the keyboards display.

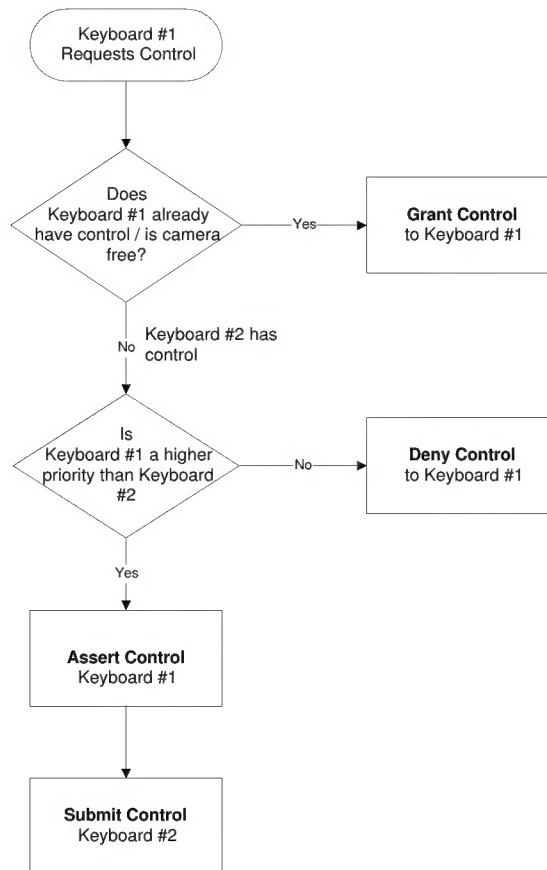
To change the current monitor, press the MON key. The current monitor field will be blanked and the operator will be able to select another monitor by using the numeric keys. Pressing the ENTER key will cause the keyboard to update it's display.

MON <number> ENTER

Once the keyboard is displaying a current monitor and a current camera it is possible to then control this camera.

### 4.1 PRIORITY CONTROL

The ZoneVu system incorporates a hierarchical system of priority camera control as illustrated below. Each keyboard is given a priority level within the range 1-8 where 8 is highest. If it's priority exceeds that of another keyboard it can take control of any camera controlled by a keyboard with a lower priority.



The keyboard requests control of a camera as soon as the operator attempts a camera control function.

If control of the camera is granted the display is updated with a letter **C** after the camera number to indicate control.

```

Camera-01C
Monitor-1
  
```

If control is denied because another keyboard of equal or higher priority is already controlling that camera, then a letter **D** is displayed after the camera number to indicate control denied.

```

Camera-01D
Monitor-1
  
```

If the letter **C** is replaced at any time with a letter **S**, then this is indicating that a camera of higher priority has taken control of the camera and that this keyboard has submitted control.

```

Camera-01S
Monitor-1
  
```

## 4.2 JOYSTICK CONTROL

The joystick is used to control the camera pan, tilt, zoom and focus operations.

The joystick has 3 axis of operation, up and down for tilt, left and right for pan, with the twist action being multifunction.

If the FC-ZM button is illuminated then the joystick twist action generates zoom commands. If the button is not illuminated then the twist action will produce focus commands. Pressing the FC-ZM button will toggle between these two modes.

FC-ZM

**Note:** if the keyboard has been denied camera control then moving the joystick will have no effect.

### 4.3 PRESET CONTROL

The keyboard supports preset commands. The available presets are split into two groups, those which can be accessed using the P1 to P8 keys and those which are accessed via the PRESET key.

The buttons P1 to P8 are referred to as **fast preset** keys. Pressing the button will send the current camera to it's predefined preset position. On completion of the preset command the keyboard relinquishes control of the camera.

Presets above 8 can be accessed by first pressing the PRESET button, then the required preset number followed by ENTER.

PRESET <number> ENTER

### 4.4 TOUR CONTROL

The keyboard supports tour start and stop commands.

To start a camera running a tour, press the TOUR button followed by the tour number and ENTER.

TOUR <number> ENTER

When a tour is in operation the keyboard displays a T followed by the tour number. This indicates to the operator that the **current camera** is performing a tour.

To tour is stopped by sending any PTZF function to the camera.

### 4.5 SEQUENCE

The keyboard supports sequence functions. A sequence is started on the **current monitor** by pressing the SEQ button followed by the sequence number and ENTER.

SEQ <number> ENTER

When a sequence is in operation, the camera number is removed and the letter S is displayed followed by the sequence number. This indicates to the operator that the **current monitor** is running a sequence.

## 4.6 AUXILIARY COMMANDS

The keyboard supports a number of auxiliary camera commands, these are selected by depressing the corresponding button. If the operation is a latched function then the button will be illuminated whilst the function is active.

On completion of the command the keyboard relinquishes control of the **current camera**.

## 4.7 SPECIAL FUNCTIONS

The keyboard supports a number of dome specific functions which are accessed by using the F2 key followed by a key P1 - P8.

- P1            90 degree anti-clockwise turn
- P2            180 degree turn
- P3            90 degree clockwise turn
- P4            Toggle proportional camera speed on/off
- P5            Toggle Auto flip on/off
- P6            Record Walk
- P7            Stop Walk
- P8            Play Walk

There are also a number of general purpose dome functions generated by pressing the F2 key followed by a number (0-99) and Enter. The use of these functions (labeled Function 0 to Function 99) is detailed in the appropriate dome's compatibility guide.

## 4.8 GLOBAL COMMANDS

Pressing the F1 button followed by a camera function allows the operator to send a command to all cameras at the same time. This command is sent to all cameras if the keyboard is in control of the current camera.

Note: cameras currently controlled by other keyboards, even of higher priority, will react to this command.

## 4.9 SITE CONTROL

In order to control cameras at a remote site, the operator first selects the site by number. The display shows the currently selected site. All camera selections then apply to that site. To select a local camera, the operator must select Site 0. The site number display is cleared to indicate local control mode.

### 4.9.1 SITE SELECTION

Press the site key, which can be configured on the **Aux** key.

- The display shows: **Site ?-**



- Enter the site number. The screen will show **s-NN** in the top right corner, where NN is the current site number.
- The current monitor will display the first unused video trunk from that site

All camera selections will be switched from the selected site, and camera control forwarded to it.

The site selection applies only to the monitor on which it is displayed. When a different monitor is selected, the keyboard screen will update to show the current site for that monitor.

## 5. OPERATIONAL CONFIGURATION

The keyboard supports a number of features that can be configured by the operator whilst controlling a camera.

### 5.1 STORING A PRESET

Presets can be stored on the current camera by first positioning the camera in the required direction. A **fast preset** can be stored by depressing the key P1 - P8 for 1 - 2 seconds. The keyboard will beep and the display will confirm the success of the preset operation.

Presets above 8 can be stored by first depressing the PRESET button for 1 -2 seconds. The keyboard will beep and the display will change to prompting for a preset number. Type the required preset number followed by ENTER.

PRESET <1-2secs><number> ENTER

The presets are stored within the receiver and are therefore accessible by all other keyboards.

### 5.2 STORING A TOUR

Tours can be stored on the **current camera** by depressing the TOUR key for 1 -2 seconds. The keyboard will beep and the display will change to prompting for a tour number.

TOUR <1-2secs><number> ENTER

On selecting a tour to configure the keyboard will begin to cycle through the following options :

1. Preset number (Range 0 – 99)
2. Approach speed (1 slow - 8 fast)
3. Dwell time (0 - 950 seconds)

The keyboard supports up to 16 presets in one patrol. When the required number of presets are configured depress the TOUR key once more for 1 - 2 seconds. The keyboard will beep and the display will confirm that the operation is complete.

Only presets 0-99 are available when programming tours

The tours are stored within the receiver and are therefore accessible by all other keyboards.

## 6. SYSTEM CONFIGURATION

The keyboard allows the operator to configure all aspects of the system : camera, matrix and keyboard.

To begin configuration depress the F1 key for 1 - 2 seconds until the keyboard beeps. Whilst in the configuration mode use the MONITOR and ENTER key to navigate. MONITOR cycles to the next available option whilst ENTER is used to edit the current fields.

**Changes are made by typing the numeric option and pressing ENTER, or pressing just ENTER to toggle options.**

It is possible to exit the configuration menus at anytime by pressing the ESC key.

The default configuration settings can be loaded by pressing the F1 key at the start of the Diagnostics routine on power up.

### 6.1 SETUP KEYBOARD

This menu option gives the operator access to features of the keyboard that can be configured.

#### 6.1.1 CONFIGURATION

Operations done to individually configure the keyboard.

##### **Camera Control**

If camera control is turned off then the keyboard cannot control cameras, though can still switch cameras to monitors. Only affects Operator level.

##### **First Monitor**

This option limits the range of monitors that an operator can select. Monitor selections are re-numbered, so that the available range starts at 1.

##### **Last Monitor**

This option limits the range of monitors that an operator can select.

##### **Nudge mode**

Nudge mode is a feature that can be used to obtain finer control of the dome. With this mode selected, the slowest dome speed is substituted for a pulsed operation which attempts to move the dome a minimum distance.

##### **Ratioed speed**

Switching this On reduces the speed range of the joystick. Useful for cameras with fast heads that do not have their own slow speed mode.

##### **Auxiliary control**

This option programs the AUX button functionality.

Aux. 1
Aux. 2
Lamp
Wash
Gear

Flip Turn
Site

**Setup PIN**

From this menu it is possible to view and edit all PIN numbers of equal or lower priority.  
To change a PIN number type the new 4 digit number then press ENTER.

**6.1.2 INSTALLATION**

This section includes those operations which are to be done at installation in order to define the system.

**MAC**

This is the address of the keyboard. No two keyboards in the same system should have the same address. The MAC can be in the range 1 - 8.

**Priority**

The priority of the keyboard can be set up to allow a keyboard to have priority access to all cameras. The priority range is 1 to 9, with 9 being the highest priority.

**Mode**

This defines the keyboard operating mode. The two available options are MATRIX or STANDALONE. Matrix mode is used when a DVM matrix is part of the system and standalone when the keyboard is directly linked to a receiver.

**Matrix type**

Matrix type is used to describe the matrix. This allows the keyboard to respond to alarms from old matrices or new matrices.

**Debug**

This option should be left set to 0 unless instructed by a Meyertech Engineer.

**6.1.3 JOYSTICK****Sensitivity**

This option affects the responsiveness of the joystick. When set to High the joystick responds to smaller movements.

**Calibrate**

It is often necessary to re-calibrate the joystick to compensate for any tolerance changes over time. On selecting Calibrate the keyboard begins to prompt the operator to move the joystick between its endpoints. It is important that when the calibrate routine is started it is completed correctly.

**Enable/Disable**

The joystick can be entirely disabled using this option

**6.1.4 CAMERA ACCESS**

In this menu option, the top line of the screen shows a camera number, the bottom line shows the access that applies to that camera.

Type in the number of a camera to alter the keyboard's access rights to it.

Alternatively, use the **Tour** key to step through the cameras one by one, and the **Preset** key to step backwards.

The menu option on the bottom line shows either **Ctrl** for Camera Control access or **View** for camera selection access.

Use the **Monitor** key to switch between options.

Use the **Enter** key to switch access on or off.

Changes have immediate effect. Select **Previous Menu** when finished.

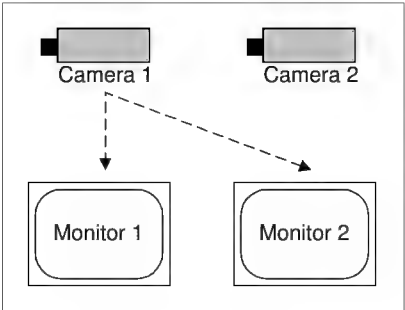
6.1.5 EXECUTIVE FEATURES

These are features that are only available to operators who log on at the Executive level.

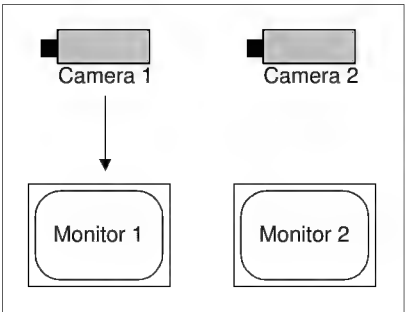
**Note:** Camera and Monitor Locking features are only currently available when used in conjunction with the **DomeVu** and **ZoneVu** series 328 matrices.

6.1.5.1 Camera Locking

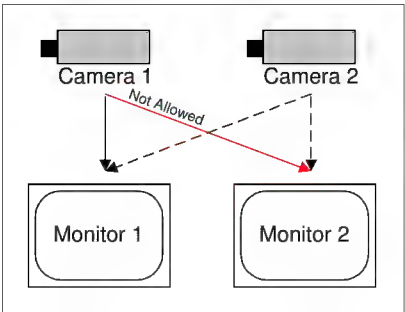
It is possible to lock a camera to a specific monitor, thereby preventing the camera from being shown on any other monitor. Selecting this option locks the currently selected monitor and camera pair. Toggle using the ENTER key. Note that control over the required camera must be available. Unlock All option available.



Camera 1 displayed on Monitor 1 and Monitor 2.



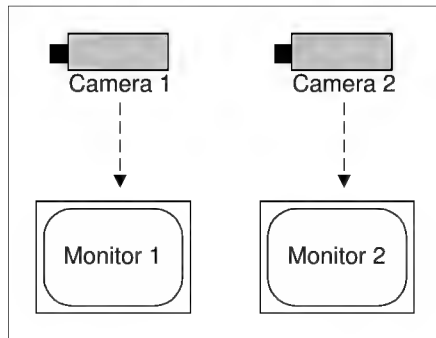
Camera 1 locked to Monitor 1 and removed from Monitor 2.



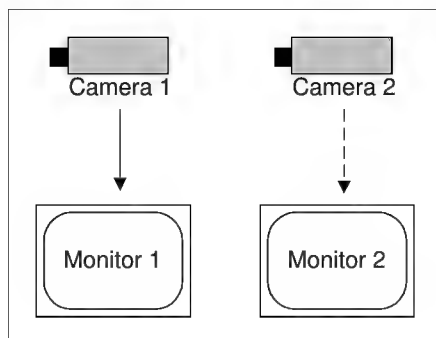
Camera 1 can only be displayed on Monitor 1.  
Camera 2 can be switched to Monitor 1 and/or Monitor 2.

### 6.1.5.2 Monitor Locking

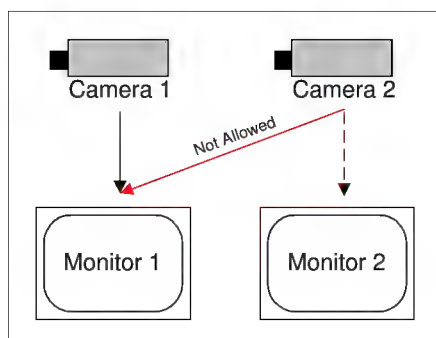
It is possible to lock monitor with a specific camera, thereby preventing any other camera from being shown on that monitor. Selecting this option locks the currently selected monitor and camera pair. Toggle using the ENTER key. Note control over the required camera must be available. Unlock All option available.



Camera 1 displayed on Monitor 1  
Camera 2 displayed on Monitor 2.



Monitor 1 locked with Camera 1  
displayed.



Camera 1 can still be displayed on  
Monitor 1 or Monitor 2.  
Camera 2 cannot be switched to  
Monitor 1.

### 6.1.6 DEFAULTS

Configuration	Camera Control	On
	First monitor	1
	Last monitor	256
	Nudge mode	Off
	Ratioed speed	Off
	Aux. Control	Aux. 1
Configuration - PIN	User	1111
	Manager	2222
	Executive	3333
Installation	MAC	1
	Priority	1
	Mode	Matrix
	Matrix type	New
	Debug	0
Joystick	Sensitivity	Low
	Calibration	Uncalibrated
	Joystick	Enable
Camera Access	View	[1 – 256] On
	Control	[1 – 256] On
Executive Features	Camera Lock	Off
	Monitor Lock	Off

## 6.2 CONFIGURE MATRIX

By selecting this option it is possible to configure the attached ZoneVu matrix. A description of the matrix configuration can be found in the corresponding user manual.  
For entering text captions see section 6.4 Entering Text.

## 6.3 CONFIGURE RECEIVER

By selecting this option it is possible to configure the attached receiver on the **current camera**. A description of the receiver configuration can be found in the corresponding user manual.

The menus can be navigated using the Monitor key and the Enter key. For entering text captions see section 6.4 Entering Text. Additionally the following keys are available for ZoneVu receivers.

Enter / Alarm	:	Select Option Confirm privacy zone co-ordinate Exit preset programming without saving position
Home / F1	:	Confirm preset position
Sequence (SEQ)	:	Toggle option Space

Joystick Up/Down:	Previous / Next field
Joystick Left/Right:	Previous / Next position
F2	: Clear field
Preset	: Delete text

After exiting the receiver menus, press Escape to return to operation.

### 6.3.1 QWERTY FUNCTION KEYS

The following commands are available from the Qwerty keyboard (see below) when configuring a ZVR-510/310:

Enter	:	Select Option Confirm privacy zone co-ordinate Exit preset programming without saving position
F1	:	Confirm preset position
Space	:	Toggle option
F2	:	Clear field

## 6.4 ENTERING TEXT

It is possible to set up a matrix or receiver without the requirement to enter any text. However if modification of the caption information is required then an external QWERTY keyboard is needed to enter text.

The QWERTY keyboard must be plugged into the socket at the rear of the keyboard. To begin using the QWERTY keyboard press F12, this will disable the keys on the DVK-001. When configuration is complete press F12 again and control will be returned back to the DVK-001.

## 6.5 SET-UP CAMERA

```
Setup-
Setup Camera
```

By selecting this option it is possible to configure camera features via ZoneVu receivers. Please refer to the relevant ZVR-xxx user manual for information on cameras supported.



## 6.6 SET-UP DIALUP

This menu option is used to configure and control a dial-up link where a Codec or similar equipment is connected through a **Meyertech** driver.

### Dial Up

Dial the selected telephone number (see below).

### Hang Up

Disconnect from the current call.

### Tel=xxx

Select the current telephone number (used by Dial Up option). Enter a number 0 – 9 to choose a telephone number from the Directory.

### MAC=xx

Select the MAC address of the dial-up driver to be used.

### Directory

Edit the list of telephone numbers. Step through the entries (0 – 9). To change an entry, enter a new number and press Enter.

## 7. TROUBLE SHOOTING GUIDE

This Trouble Shooting Guide should be used in the first instance of encountering any problems with the DVK-001. If problems persist, contact MEYERTECH on the Technical Help line numbers given on page 23.

<i><b>Symptom</b></i>	<i><b>Solution</b></i>
Camera moves without joystick control.	Calibrate keyboard joystick. See Section 6.1.3 on page 3.
Comms Error	Keyboard is not receiving polls. Check connection between keyboard and matrix.
Keyboard Error On Power Up	Keyboard is detecting a key stuck.
Joystick Error On Power Up	Keyboard is detecting that the joystick is not centralized. Calibrate joystick (see Section 6.1.3 on page 3).

**8. DECLARATION OF CONFORMITY****EC DECLARATION OF CONFORMITY ACCORDING  
TO ARTICLE 10 OF COUNCIL DIRECTIVE 89/ 336/ EEC****Manufacture's Name:** **MEYERTECH LIMITED****Manufacture's Address:** MEYERTECH LIMITED  
Office Block One  
Southlink Business Park  
Oldham  
OL4 1DE**declares, that the product(s):**

Product Name : DVK-001 Keyboard

Model(s) : All

Product Options : All

**conforms to the following Product Specifications :**EN55022 CLASS B  
EN50093  
EN60950 Amendments 1, 2, & 3 1992**Supplementary Information :**

MEYERTECH declare under our sole responsibility that the product to which this declaration relates, is in conformity with the protection requirements of council directive 89/336/eeec on the approximation of the laws of the member states relating to electromagnetic compatibility.

**SIGNED** -**S K MEYERS**  
**Director MEYERTECH LIMITED**

ISSUED THIS DAY : 1st May 1997

**European Contact : Meyertech Limited (Head Office), Office Block One,  
Southlink Business Park, Oldham, England, OL4 1DE.**

## 9. Product Warranty

**MEYERTECH LIMITED** warrants that at the time of shipment the products manufactured by Meyertech will be free from defects in material and workmanship.

Should any defects appear within twelve months from date of shipment, Meyertech Limited shall at its sole discretion repair or replace the defective material. Such material shall not be accepted for return or repair without prior notification of Meyertech Limited.

Return shipments to Meyertech Limited shall be at the customers expense. Meyertech Limited will return said equipment prepaid via best way.

This warranty is in lieu of and excludes any and all other expressed or implied warranties of merchantability or fitness, or otherwise. Items manufactured by any supplier other than Meyertech Limited shall bear only the warranty made by the manufacturer of that product, and Meyertech Limited assumes no responsibility for the performance or reliability of that product.

Meyertech Limited will not be liable for any special or consequential damages, or for loss, damages, or expense directly or indirectly arising from the use of the products, or any inability to use them either separately or in combination with any other equipment or material or from any other cause.

This warranty does not extend to any product manufactured by Meyertech Limited which has been subject to misuse, neglect, accident, war, civil disturbance, terrorist acts, improper installation, act of God, or in violation of the instructions supplied by Meyertech Limited.

10. DOCUMENT HISTORY

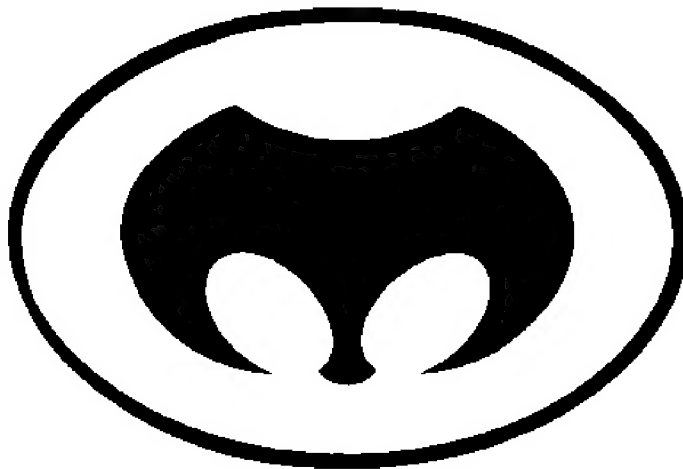
DVK-001 Keyboard Users Manual : DVK-001UserManual

ISSUE	DATE	CHANGE RECORD
01	13 October 1997	First Issue
02	3 September 1998	Updated for new features in V1.20
03	20 June 2002	Added Zvr 500/510 config keys for ext. keyboard New section for site mode operation Camera access restrictions added to configuration
04	27 April 2004	Range of presets changed from 0-99 to 0-999 Limited tour presets to 99

# NOTES

---

# MEYERTECH LIMITED



**SECURITY** *with* **VISION**

Office Block One  
Southlink Business Park  
Oldham  
England  
OL4 1DE

## Sales Support



+44 (0)161 628 8406



+44 (0)161 628 9811

Email : [sales@meyertech.co.uk](mailto:sales@meyertech.co.uk)

## Technical Support



+44 (0)1724 278 833

Email : [technical@meyertech.co.uk](mailto:technical@meyertech.co.uk)

<http://www.meyertech.co.uk>